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A POLYTECHNIC INSTITUTE
STATE UNIVERSITY

Department of Athletics
Strength and Conditioning
150 Jamerson Athletic Center
Blacksburg, Virginia 24061-0502
(540) 231-7386 Fax: (540) 231-3060

Dear Hokies:

I hope your Spring has been a pleasant and productive one. Our players had an outstanding winter strength and conditioning program and a very productive spring practice!

The summer is the most important time in the physical development of a football player. You have ten - twelve weeks to concentrate on getting bigger, faster, and stronger.

Approximately seventy Hokies will spend their summer in Blacksburg working with great intensity and enthusiasm. Our players stay because they know what it takes to become a Champion.

I have written a specific work-out for you that is designed to allow you to report in great physical condition. This plan should be followed daily.

When you report you will be tested in the bench press, vertical jump, 40 yard time, 20 yard shuttle, height, weight, and 12-110's. **If you fail the 110's test you will be required to do extra conditioning during two-a-days**.

If you are serious about playing at this level, you must be in shape when you report to camp. **IF YOU CAN'T RUN, YOU CAN'T PLAY!!**

Best of luck to you while you prepare. I look forward to working with you in the fall.

SWEAT BLOOD,

Coach Gentry

Coach Gentry
Director of Strength and Conditioning

GOAL SETTING

Seven Steps to Success

Step 1. **Set a clear, specific goal** that you must achieve. **Write it down**.

Step 2. **Set a definite date for achieving your goal** and commit yourself to it. **Write it down**.

Step 3. **Break down larger goals into smaller goals**. **Write down the subgoals** and the dates you intend to achieve them by.

Step 4. **Measure your progress** honestly and regularly.

Step 5. **Create compelling motivation**. List all the reasons why you absolutely will and **must** obtain your goal. List all the negatives that would happen if you fail to take the necessary actions to reach your goal.

Step 6. Take some time each day to **visualize your goals**. **See yourself obtaining the goal**.

Step 7. **Believe in yourself**.

PERSONAL GOALS FOR FALL 2000

BODY WEIGHT ______________________

BENCH PRESS ______________________

BACK SQUAT ______________________

POWER CLEAN ______________________

VERTICAL JUMP ______________________

LOOK AT THIS PAGE DAILY!

SEE YOURSELF MAKING YOUR GOALS!!

WORK TO MAKE IT HAPPEN!!!

240 = 528
250 = 550
260 = 572
270 = 594

FOOTBALL WEIGHT LIFTING GOALS

	AWARD LEVELS	SQUAT	BENCH	HANG CLEAN	FRONT PUSH PRESS	TOTAL
LINEMEN	IRON HOKIE	575	400	350	340	1665
	HOKIE	525	30 370	330	320	1545
	ORANGE	500	30 340	300	295	1435
	MAROON	470	20 320	275	265	1330
TE, ILB, DE, FB	IRON HOKIE	525	365 355	330	320	1530
	HOKIE	500	15 340	305	300	1445
	ORANGE	475	20 320	285	280	1360
	MAROON	450	20 300	260	260	1270
WHIP LB, TB, DB	IRON HOKIE	475	340	315	305	1425
X	HOKIE	450	320	290	285	1345 X
	ORANGE	425	300	270	265	1260
	MAROON	400	280	250	245	1175
QB, WR, SPEC	IRON HOKIE	450	320	290	275	1335
	HOKIE	425	20 300	270	255	1250
	ORANGE	400	25 275	250	235	1160
	MAROON	375	25 250	230	215	1070

REQUIREMENTS:

1) EACH LEVEL MUST REACH TOTAL WEIGHT.

2) **ALL MAROON REQUIREMENTS MUST BE MET BEFORE RECEIVING MAROON AWARD OR ANY HIGHER AWARD.**

3) ORANGE MUST MEET OR EXCEED 3 LIFT REQUIREMENTS AND TOTAL.

4) HOKIE MUST MEET 2 LIFT REQUIREMENTS AND TOTAL.

5) IRON HOKIE MUST MEET 1 LIFT REQUIREMENT AND TOTAL.

6) SUPER IRON HOKIE MUST MEET ALL IRON HOKIE LIFT REQUIREMENTS AND TOTAL.

7) **YOU MUST PASS THE 12 - 110'S CONDITIONING TEST TO BE ELIGIBLE FOR ANY AWARD IN FALL TESTING.**

2000 FALL CONDITIONING TEST

This year you will do 16 - 110 yard sprints.

The times are:

19 sec. - Offensive linemen and defensive tackles.

17 sec. - Inside LB's, Whip LB's, Def. Ends, Tight Ends, Full Backs, Quarterbacks, and Specialists

15 sec. - Wide Receivers, Defensive Backs, Tailbacks

45 Second rest between 110's.

You must be across the line when the time is called!!

You must pass the test in order to be eligible for strength awards.

Failure to pass the test will result in extra conditioning after practice.

STRENGTH WORK-OUT for USE PRIOR TO WEEK 1

Monday Jump Rope or Dot Drills	Wednesday Jump Rope or Dot Drills	Friday Jump Rope or Dot Drills
Abs - twisting sit ups - 2 x 20	**Abs** - Slow Crunches - 2 x 15	**Abs** - hanging leg raises 2 x 20 OR twisting sit ups 2 x 20
Chest Bench Press week 1 and 2 - 3 sets - 10 reps week 3 and 4 - 4 sets - 8 reps week 5 and 6 - 4 sets - 5-6 reps	**Chest** Incline Bench Press weeks 1,2,3 - 3 sets - 10 reps weeks 4,5,6 - 4 sets - 6 reps	**Chest** Close Grip Bench Press weeks 1,2,3 - 3 sets - 10 reps weeks 4,5,6 - 4 sets - 6 reps
Legs Squat or Leg Press - 4 sets - 10 reps Leg Curls - 2-3 sets - 10 reps Calf Raises - 3 sets - 15 reps	**Legs** Leg Extensions - 3 sets - 10 reps Leg Curls - 3 sets - 10 reps Calf Raises - 3 sets - 20 reps	**Legs** Squat or Leg Press - 3 sets - 10 reps Leg Curls - 2-3 sets - 10 reps Calf Raises - 3 sets - 15 reps
Shoulders Seated Behind Neck Press weeks 1,2,3 - 3 sets - 10 reps. weeks 4,5,6 - 3 sets - 8 reps	**Shoulders** Dumbbell 21's - 2 sets (front, lateral and bent over raises, 7 reps each)	**Shoulders** Seated Dumbbell Aleternate Overhead Press weeks 1,2,3 - 3 sets - 10 reps weeks 4,5,6 - 3 sets - 8 reps
Back Lat pulldowns (to front - under hand grip) 3 sets - 10 reps	**Back** Barbell Shrugs - 3 sets - 10 reps One Arm Dumbbell Rows	**Back** Pullups - 3 sets - 5-10 reps OR Lat Pulldowns - 3 sets - 10 reps
Arms Barbell Curls - 3 sets - 10 reps Tricep Pulldowns - 3 sets - 10-12 reps optional - Neck Machine OR Neck ISO exercise	**Arms** Standing Dumbbell Alternate Dumbbell Curls - 3 sets - 8-10 reps Dips - 3 sets - 10 reps OR Bench Dips - 3 sets - 10-15 reps	**Arms** Barbell Curls - 3 sets - 10 reps Triceps Pushdowns - 3 sets - 10-12 reps Optional - Neck Machine - 1 set - 10 reps OR Neck ISO Exercise - 1 set - 6 reps
STRETCH	**STRETCH**	**STRETCH**

STRENGTH WORK-OUT for USE PRIOR TO WEEK 1

Monday - Chest, Shoulders, Arms Jump Rope or Dot Drills	**Tuesday** - Legs, Back Jump Rope or Dot Drills	**Thursday** - Chest, Shoulders, Arms Jump Rope or Dot Drills	**Friday** - Back, Legs Jump Rope or Dot Drills
Abs - twisting sit ups - 2 x 20 **Chest** Bench Press week 1,2,3 - 3 sets - 10 reps week 4,5,6 - 4 sets -5-6 reps Dumbbell Flys 2-3 sets - 10 reps **Shoulders** Seated Dumbbell Overhead Press weeks 1,2,3 - 3 sets - 10 reps weeks 4,5,6 - 3 sets - 8 reps Dumbbell 21's - 1 set (front, lateral and bent over raises, 7 reps each) **Arms** Biceps - seated Dumbbell Alternate Curls - 3 sets - 8-10 reps Triceps-Triceps Pushdowns 3 sets - 10-12 reps Forarms - Wrist roller Optional - Neck Machine - 1 set - 10 reps OR Neck ISO Exercise - 1 set - 6 reps **STRETCH**	Abs - Hokie Leg Raises 2 x 15 **Legs** Squat or Leg Press weeks 1,2,3 - 3 sets - 10 reps weeks 4,5,6 - 4 sets - 8 reps **Back** Barbell Shrugs - 3 sets - 10 reps Seated Cable Rows - 3 sets - 8-10 reps OR One Arm Dumbbell Rows 3 sets - 8-10 reps Pullups - 3 sets - 5-10 reps OR Lat Pulldowns (front, underhand grip) 3 sets - 8-10 reps **Legs** Leg Extension Machine 3 sets - 10 reps Leg Curl Machine - 3 sets - 10 reps Calf Raise Machine - 3 sets - 15 reps **STRETCH**	Abs - slow crunches 2 x 15 **Chest** Incline Bench Press weeks 1,2,3 - 3 sets - 10 reps weeks 4,5,6 - 4 sets - 8 reps Dumbbell flys 3 sets - 10 reps **Shoulders** Seated Barbell behind the Neck Press - 3 sets - 10 reps OR Seated Barbell Front Press 3 sets - 10 reps Plate, Raises or Dumbbell 21's 1 set - 20 reps **Arms** Bicep - Standing Barbell Curls 3 sets - 10 reps Triceps - Dips - 3 sets - 10 reps OR Bench Dips - 3 sets 10-15 reps Forearms-wrist roller - 1-2 sets Optional - Neck Machine - 1 set - 10 reps OR Neck ISO Exercise 1 set - 6 reps **STRETCH**	Abs - Hokie Leg Raises 2 x 15 **Legs** Squat or Leg Press - 3 sets - 10 reps **Back** Barbell or Dumbbell Shrugs - 3 sets - 10 reps Seated Cable Rows - 3 sets - 10 reps OR One Arm Dubbell Rows - 3 sets - 10 reps Pullups - 3 sets - 5-10 reps OR Lat Pulldowns (front, underhand grip) 3 sets - 10 reps **Legs** Leg Extension Machine - 2-3 sets - 10 reps Leg Curl Machine - 2-3 sets - 10 reps Calf Raise Machine - 2-3 sets - 15-20 reps **STRETCH**

WEEK # 1 DATE June 5-9

SIGNEE'S SUMMER WORK-OUT

"HE WHO BELIEVES IS STRONG; HE WHO DOUBTS IS WEAK."
J.F. CLARKE

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS WARM-UP 10 REPS 61% - 10 REPS 64% - 10 REPS(2 SETS)	**BACK SQUAT** WARM-UP - 10 61% - 10 REPS 64% - 10 REPS(2 SETS)	PLAY BASKETBALL, RACQUETBALL, DO MARTIAL ARTS ETC.	**INCLINE BENCH PRESS** 4 SETS - 10 REPS. **D'BELL BENCH PRESS** (STOP AND STAB) 3 SETS - 10 REPS	**HANG CLEAN** WARM-UP - 5 REPS 61% - 5 REPS 64% - 5 REPS 67% - 5 REPS
INCLINE D'BELL PRESS (STOP AND STAB) 3 SETS - 10 REPS	**LEG CURLS** 3 SETS - 10 REPS **CALF RAISES** 3 SETS - 15 REPS	OR RUN 1 - 1 1/2 MILES EASY PACE	**SEATED D'BELL OVERHEAD PRESS** 3 SETS - 10 REPS	**FRONT SQUATS** 4 SETS - 6 REPS
DUMBELL SHOULDER RAISES 21'S 7-FRONT 7-LATERAL 7-BENT OVER (2 SETS)	**SHRUGS** 3 SETS-10 REPS **BENT-OVER ROWS** 3 SETS - 10 REPS		**CURLS** 3 SETS - 10 REPS **LYING TRICEP EXTENSION** (WITH CURL BAR) 3 SETS - 10 REPS	**PULLUPS** 2 SETS-8-10 REPS OR **LAT.PULLDOWNS** 3 SETS - 10 REPS
CURLS 3 SETS - 10 REPS **DIPS** 3 SETS - 10 REPS	**PULLUPS** 2-3 REPS - 8-10 REPS		**4-WAY NECK MACHINE** 1 SET - 10 REPS	**SEATED CABLE ROWS** 3 SETS - 10 REPS OR **D'BELL ROWS** 3 SETS - 10 REPS
4 WAY NECK MACHINE 1 SET - 10 REPS **ABS - CRUNCHES** 2 X 25 LEG RAISES 1 X 25 STRETCH	**ABS REGULAR SIT UPS** 2 SETS - 25 REPS STRETCH		**ABS** CRUNCHES 2 X 25 LEG RAISES 1 X 25 STRETCH	**LEG EXTENSIONS** 2 SETS - 10 REPS LEG CURLS 2 SETS-10 REPS **CALF RAISES** 3 SETS - 10 REPS **ABS** REGULAR SIT-UPS 2 X 25 STRETCH
CONDITIONING 6-100'S SPRINT FORWARD WALK BACK TO LINE 4-40 YD BACKPEDELS	*SPEED WORK-OUT (BEFORE LIFTING) STARTS - 4 - 10 YDS BACKWARD HIGH KNEES 2-10 YDS HIGH KNEE CROSSOVERS 2-10 YDS POWER SKIPS-2 X 20 YDS BOUNDING 2 X 20 YDS FORM RUNNING 2 X 30 YDS		CONDITIONING 6-100'S-SPRINT FORWARD WALK BACK TO LINE 4-40 YD BACKPEDDLES	*SPEED WORK-OUT (BEFORE LIFTING) SAME AS TUE'S WORK-OUT

WEEK # 2 DATE June 12-16

SIGNEE'S SUMMER WORK-OUT

"WELL DONE IS BETTER THAN WELL SAID."

BEN FRANKLIN

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS WARM-UP 10 REPS 61% - 10 REPS 64% - 10 REPS 67% - 10 REPS	**BACK SQUAT** WARM-UP - 10 61% - 10 REPS 64% - 10 REPS 67% - 10 REPS	PLAY BASKETBALL, RACQUETBALL, DO MARTIAL ARTS ETC.	**INCLINE BENCH PRESS** 4 SETS - 10 REPS **D'BELL BENCH PRESS** (STOP AND STAB) 3 SETS - 10 REPS	**HANG CLEAN** WARM-UP - 5 REPS 64% - 5 REPS 67% - 5 REPS 70% - 5 REPS
INCLINE D'BELL PRESS (STOP AND STAB) 3 SETS - 10 REPS	**LEG CURLS** 3 SETS - 10 REPS **CALF RAISES** 3 SETS - 15 REPS	OR RUN 1 - 1 1/2 MILES EASY PACE	**SEATED D'BELL OVERHEAD PRESS** 3 SETS - 10 REPS	**FRONT SQUATS** 4 SETS - 6 REPS
DUMBELL SHOULDER RAISES 21'S 7-FRONT 7-LATERAL 7-BENT OVER (2 SETS)	**SHRUGS** 3 SETS-10 REPS **BENT-OVER ROWS** 3 SETS - 10 REPS		**CURLS** 3 SETS - 10 REPS **LYING TRICEP EXTENSION** (WITH CURL BAR) 3 SETS - 10 REPS	**PULLUPS** 2 SETS-8-10 REPS OR **LAT.PULLDOWNS** 3 SETS - 10 REPS
CURLS 3 SETS - 10 REPS **DIPS** 3 SETS - 10 REPS	**PULLUPS** 2-3 REPS - 8-10 REPS		**4-WAY NECK MACHINE** 1 SET - 10 REPS	**SEATED CABLE ROWS** 3 SETS - 10 REPS OR **D'BELL ROWS** 3 SETS - 10 REPS
4 WAY NECK MACHINE 1 SET - 10 REPS **ABS - CRUNCHES** 2 X 15 **REVERSE CRUNCHES** 2 X 15 STRETCH	**ABS REGULAR TWISTING** SIT-UPS (HANDS BEHIND HEAD) 2 SETS-25 REPS STRETCH		**ABS** CRUNCHES 2 X 25 LEG RAISES 1 X 20 STRETCH	**LEG EXTENSIONS** 2 SETS - 10 REPS **LEG CURLS** 2 SETS-10 REPS **CALF RAISES** 3 SETS - 15 REPS **ABS-TWISTING SIT-UPS** 2 X 25 STRETCH
CONDITIONING(AFTER WTS.) 6-100'S SPRINT FORWARD WALK BACK TO LINE 5-40 YD BACKPEDELS	*SPEED WORK-OUT (BEFORE WEIGHTS) STARTS-4 REPS-10 YDS BACKWARD HIGH KNEES 4-10 YDS HIGH KNEE CROSSOVERS 4-10 YDS POWER SKIPS-2 X 30 YDS BOUNDING 2 X 30 YDS FORM RUNNING 2 X 30 YDS		CONDITIONING(AFTER WTS.) 6-100'S-SPRINT FORWARD WALK BACK TO LINE 5-40 YD BACKPEDDLES	*SPEED WORK-OUT (BEFORE WEIGHTS) SAME AS TUE'S WORK-OUT

WEEK # 3 DATE June 19-23

SIGNEE'S SUMMER WORK-OUT

"SUCCESS IS A JOURNEY, NOT A DESTINATION."
BEN SWEETLAND

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS WARM-UP 10 REPS 61% - 8 REPS 64% - 8 REPS 70% - 8 REPS	**BACK SQUAT** WARM-UP - 10 61% - 8 REPS 64% - 8 REPS 70% - 8 REPS	PLAY BASKETBALL, RACQUETBALL, DO MARTIAL ARTS ETC. OR	**INCLINE BENCH PRESS** 4 SETS - 8 REPS **D'BELL BENCH PRESS** (STOP AND STAB) 3 SETS - 8 REPS	**HANG CLEAN** WARM-UP - 5 REPS 61% - 5 REPS 67% - 5 REPS 73% - 5 REPS 2 SETS
INCLINE D'BELL PRESS (STOP AND STAB) 3 SETS - 8 REPS	**LEG CURLS** 3 SETS - 10 REPS	RUN 1 - 1 1/2 MILES EASY PACE	**SEATED D'BELL OVERHEAD PRESS** 3 SETS - 8 REPS	**FRONT SQUATS** 4 SETS - 5 REPS
DUMBELL SHOULDER RAISES 21'S (DON'T REST) 2 SETS	**CALF RAISES** 3 SETS - 15 REPS **SHRUGS** 3 SETS-8 REPS **BENT-OVER ROWS** 3 SETS - 8 REPS		**CURLS** 3 SETS - 10 REPS **LYING TRICEP EXTENSION** (WITH CURL BAR) 3 SETS - 8 REPS	**PULLUPS** 2-3 SETS 5-10 REPS OR **LAT.PULLDOWNS** 3 SETS - 10 REPS
CURLS 3 SETS - 10 REPS **DIPS** 3 SETS - 8 REPS	**PULLUPS** 2-3 REPS - 8-10 REPS		**4-WAY NECK MACHINE** 1 SET - 10 REPS	**SEATED CABLE ROWS** 3 SETS - 8 REPS OR **D'BELL ROWS** 3 SETS - 8 REPS
4 WAY NECK MACHINE 1 SET - 10 REPS **ABS - CRUNCHES** 2 X 20 **REVERSE CRUNCHES** 2 X 15 REPS STRETCH	**ABS REGULAR TWISTING** SIT-UPS (HANDS BEHIND HEAD) 2 SETS-20-25 REPS STRETCH		**ABS** CRUNCHES 2 X 25 LEG RAISES 1 X 20 REPS STRETCH	**LEG EXTENSIONS** 2 SETS - 10 REPS **LEG CURLS** 2 SETS-10 REPS **CALF RAISES** 3 SETS - 15 REPS **ABS-TWISTING SIT-UPS** 2 SETS - 25 REPS STRETCH
CONDITIONING (AFTER WTS.) 6-100'S SPRINT FORWARD WALK BACK TO LINE 5-40 YD BACKPEDELS	*SPEED WORK-OUT (BEFORE WEIGHTS) STARTS-4 REPS-10 YDS BACKWARD HIGH KNEES 4-10 YDS HIGH KNEE CROSSOVERS 4-10 YDS POWER SKIPS-2 X 30 YDS BOUNDING 2 X 30 YDS FORM RUNNING 2 X 30 YDS		CONDITIONING (AFTER WTS.) 6-100'S-SPRINT FORWARD WALK BACK TO LINE 5-40 YD BACKPEDDLES	*SPEED WORK-OUT (BEFORE WEIGHTS) SAME AS TUE'S WORK-OUT

WEEK # 4 DATE June 26-30 SIGNEE'S SUMMER WORK-OUT

"FAILURE WILL NEVER OVERTAKE YOU IF YOUR DESIRE TO SUCCEED IS STRONG ENOUGH."
OG MANDINO

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS WARM-UP 10 REPS 61% - 5 REPS 67% - 5 REPS 73% - 5 REPS 79% - 5 REPS	**BACK SQUAT** WARM-UP - 10 61% - 5 REPS 67% - 5 REPS 73% - 5 REPS 79% - 5 REPS	PLAY BASKETBALL, RACQUETBALL, BASEBALL DO MARTIAL ARTS ETC.	**INCLINE BENCH PRESS** 4 SETS - 8 REPS **D'BELL BENCH PRESS** (STOP AND STAB) 3 SETS - 8 REPS	**HANG CLEAN** WARM-UP - 5 REPS 64% - 5 REPS 70% - 5 REPS 76% - 5 REPS
INCLINE D'BELL PRESS (STOP AND STAB) 3 SETS - 8 REPS	**LEG CURLS** 3 SETS - 10 REPS **CALF RAISES** 3 SETS - 15 REPS	OR RUN 1 - 2 MILES EASY PACE	**SEATED D'BELL OVERHEAD PRESS** 3 SETS - 8 REPS **CURLS** 3 SETS-8-10 REPS	**FRONT SQUATS** 4 SETS - 5 REPS
DUMBELL SHOULDER RAISES 21'S (DON'T REST) 2 SETS	**SHRUGS** 3 SETS-8 REPS **BENT-OVER ROWS** 3 SETS - 8 REPS		**LYING TRICEP EXTENSION** (WITH CURL BAR) 3 SETS - 8 REPS	**PULLUPS** 2 SETS 8-10 REPS OR **LAT.PULLDOWNS** 3 SETS - 10 REPS
CURLS 3 SETS - 10 REPS **DIPS** 3 SETS - 8 REPS	**PULLUPS** 2-3 REPS - 8-10 REPS		**4-WAY NECK MACHINE** 1 SET - 10 REPS	**SEATED CABLE ROWS** 3 SETS - 8 REPS OR **D'BELL ROWS** 3 SETS - 8 REPS
4 WAY NECK MACHINE 1 SET - 10 REPS **ABS - CRUNCHES** 2 X 20 **REVERSE CRUNCHES** 2 X 15 REPS STRETCH	**ABS REGULAR TWISTING** SIT-UPS (HANDS BEHIND HEAD) 2 SETS-20-25 REPS STRETCH		**ABS** CRUNCHES 2 X 20-25 LEG RAISES 1 X 20 REPS STRETCH	**LEG EXTENSIONS** 2 SETS - 10 REPS **LEG CURLS** 2 SETS-10 REPS **CALF RAISES** 3 SETS - 15 REPS **ABS-TWISTING SIT-UPS** 2 SETS - 25 REPS STRETCH
CONDITIONING(AFTER WTS.) 8-110'S 17 SEC SKILL POS. 19 SEC LINEMEN 45 SEC REST BETWEEN 110'S	*SPEED WORK-OUT (BEFORE WEIGHTS) STARTS-4 REPS-10 YDS BACKWARD HIGH KNEES 2-10 YDS HIGH KNEE CROSSOVERS 2-10 YDS POWER SKIPS-2 X 40 YDS BOUNDING 2 X 30 YDS FORM RUNNING 4 X 30 YDS		CONDITIONING(AFTER WTS.) 8-110'S 17 SEC SKILL POS. 19 SEC LINEMEN 45 SEC REST BETWEEN 110'S	*SPEED WORK-OUT (BEFORE WEIGHTS) SAME AS TUE'S WORK

WEEK # 5 DATE July 3-7 SIGNEE'S SUMMER WORK-OUT

"A MAN'S DREAMS ARE AN INDEX TO HIS GREATNESS!"
Z. RABINOWITZ

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS WARM-UP 10 REPS 64% - 5 REPS 70% - 5 REPS 76% - 5 REPS 82% - 5 REPS	**BACK SQUAT** WARM-UP - 10 64% - 5 REPS 70% - 5 REPS 76% - 5 REPS 82% - 5 REPS	PLAY BASKETBALL, RACQUETBALL, DO MARTIAL ARTS ETC. OR	**INCLINE BENCH PRESS** 4 SETS - 6 REPS **D'BELL BENCH PRESS** (STOP AND STAB) 3 SETS - 6 REPS	**HANG CLEAN** WARM-UP - 5 REPS 61% - 5 REPS 67% - 5 REPS 73% - 5 REPS 79% - 5 REPS
CLOSE GRIP BENCH PRESS 2 SETS - 8 REPS	**STRAIGHT LEG DEADLIFTS** 2 SETS - 8 REPS	RUN 1 - 2 MILES EASY PACE	**WEIGHTED DIPS** 3 SETS - 8 REPS	**BOX STEP UPS** 2 SETS - 5 REPS EACH LEG
SEATED D'BELL OVERHEAD PRESS 3 SETS - 6 REPS	**SEATED CABLE ROWS** 3 SETS - 8 REPS		**BARBELL CURLS** 4 SETS 8-10 REPS	**LUNGES** 2 SETS-5 REPS EACH LEG
ALTERNATE D'BELL CURLS 3 SETS - 10 REPS	**D'BELL ROWS** 3 SETS - 8 REPS			**PULLUPS** 2-3 SETS-8-10 REPS
	LAT. MACHINE PULLDOWNS 3 SETS - 10 REPS		**4-WAY NECK MACHINE** 1 SET - 10 REPS	**SHRUGS** 3 SETS - 8 REPS
	CALF RAISES 3 SETS - 15 REPS		**ABS-TWISTING SIT-UPS** 2 SETS - 25 REPS	**CALF RAISES** 3 SETS - 15 REPS
4 WAY NECK MACHINE 1 SET - 10 REPS	**ABS** **CRUNCHES**-2 SETS-20 REPS **REVERSE CRUNCHES** 2 SETS-20 REPS			**ABS CRUNCHES** 2 X 25 **REVERSE CRUNCHES** 2 X 20
ABS - TWISTING SIT-UPS 2 SETS - 25 REPS	STRETCH		STRETCH	
STRETCH	*SPEED WORK-OUT (BEFORE WEIGHTS) STARTS-4 - 10 YDS BACKWARD HIGH KNEES 2-10 YDS POWER SKIPS 4 X 40 YDS FORM RUNNING 4 X 30 YDS			STRETCH
CONDITIONING (AFTER WTS.) 9-110'S 17 SEC SKILL POS. 19 SEC LINEMEN 45 SEC REST BETWEEN 110'S			CONDITIONING (AFTER WTS.) 9-110'S 17 SEC-SKILL POS. 19 SEC-LINEMEN 45 SEC REST BETWEEN 110'S	*SPEED WORK-OUT (BEFORE WEIGHTS) SAME AS TUE'S WORK-OUT

WEEK # 6 DATE July 10-14 SIGNEE'S SUMMER WORK-OUT

"THE WILLINGNESS TO DO CREATES THE ABILITY TO DO."

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS WARM-UP 10 REPS 67% - 5 REPS 73% - 5 REPS 79% - 5 REPS 85% - 5 REPS **CLOSE GRIP BENCH PRESS** 2 SETS - 8 REPS **SEATED D'BELL OVERHEAD PRESS** 3 SETS - 6 REPS **ALTERNATE D'BELL CURLS** 3 SETS - 10 REPS **4 WAY NECK MACHINE** 1 SET - 10 REPS **ABS - TWISTING SIT-UPS** 2 SETS - 25 REPS STRETCH	**BACK SQUAT** WARM-UP - 10 67% - 5 REPS 73% - 5 REPS 79% - 5 REPS 85% - 5 REPS **STRAIGHT LEG DEADLIFTS** 2 SETS - 8 REPS **SEATED CABLE ROWS** 3 SETS - 8 REPS **D'BELL ROWS** 3 SETS - 8 REPS **LAT. MACHINE PULLDOWNS** 3 SETS - 10 REPS **CALF RAISES** 3 SETS - 15 REPS **ABS** CRUNCHES-2 SETS-20 REPS **REVERSE CRUNCHES** 2 SETS-20 REPS STRETCH	PLAY BASKETBALL, RACQUETBALL, DO MARTIAL ARTS ETC. OR RUN 1 - 2 MILES EASY PACE	**INCLINE BENCH PRESS** 4 SETS - 6 REPS **D'BELL BENCH PRESS** 3 SETS - 6 REPS **WEIGHTED DIPS** 3 SETS - 8 REPS **BARBELL CURLS** 4 SETS 8-10 REPS **4-WAY NECK MACHINE** 1 SET - 10 REPS **ABS-TWISTING SIT-UPS** 2 SETS - 25 REPS STRETCH	**HANG CLEAN** WARM-UP - 5 REPS 64% - 3 REPS 70% - 3 REPS 76% - 3 REPS 82% - 3 REPS **BOX STEP UPS** 2 SETS - 5 REPS **LUNGES** 2 SETS-5 REPS **SHRUGS** 3 SETS - 8 REPS **CALF RAISES** 3 SETS - 15 REPS **ABS CRUNCHES** 2 X 25 **REVERSE CRUNCHES** 2 X 20 STRETCH
CONDITIONING (AFTER WTS.) 10-110'S 17 SEC SKILL POS. 19 SEC LINEMEN 45 SEC REST BETWEEN 110'S	*SPEED WORK-OUT (BEFORE WEIGHTS) STARTS-4 - 10 YDS BACKWARD HIGH KNEES 2-10 YDS BOUNDING 4 X 30 YDS FORM RUNNING 4 X 30 YDS		CONDITIONING (AFTER WTS.) 10-110'S 17 SEC-SKILL POS. 19 SEC-LINEMEN 45 SEC REST BETWEEN 110'S	*SPEED WORK-OUT (BEFORE WEIGHTS) SAME AS TUE'S WORK-OUT

WEEK # 7 DATE July 17-21 SIGNEE'S SUMMER WORK-OUT

"SUCCESS DOES NOT COME TO YOU, YOU GO TO IT."

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS	**BACK SQUAT**		**INCLINE BENCH PRESS**	**HANG CLEAN**
WARM-UP 10 REPS	WARM-UP - 10		4 SETS - 6 REPS	WARM-UP - 5 REPS
64% - 5 REPS	64% - 5 REPS	PLAY BASKETBALL,		61% - 3 REPS
70% - 5 REPS	70% - 5 REPS	RACQUETBALL,	**D'BELL BENCH PRESS**	67% - 3 REPS
76% - 3 REPS	76% - 3 REPS	DO MARTIAL ARTS ETC.	(STOP AND STAB)	73% - 3 REPS
82% - 3 REPS	82% - 3 REPS		3 SETS - 6 REPS	79% - 3 REPS
88% - 3 REPS	88% - 3 REPS	OR		85% - 3 REPS
CLOSE GRIP BENCH PRESS	**STRAIGHT LEG DEADLIFTS**		**WEIGHTED DIPS**	
2 SETS - 6 REPS	2 SETS - 8 REPS	RUN 1 - 2 MILES	3 SETS - 8 REPS	**BOX STEP UPS**
		EASY PACE		2 SETS - 5 REPS
	SEATED CABLE ROWS		**BARBELL CURLS**	
SEATED D'BELL	3 SETS - 8 REPS		4 SETS 8 REPS	
OVERHEAD PRESS	OR			**LUNGES** 2 SETS-5 REPS
3 SETS - 6 REPS	**D'BELL ROWS**			
	3 SETS - 8 REPS			
ALTERNATE D'BELL CURLS				
3 SETS - 10 REPS	**LAT. MACHINE PULLDOWNS**			
	3 SETS - 10 REPS		**4-WAY NECK MACHINE**	**SHRUGS**
			1 SET - 10 REPS	3 SETS - 8 REPS
	CALF RAISES			
	3 SETS - 15 REPS		**ABS-TWISTING SIT-UPS**	**CALF RAISES**
	ABS		2 SETS - 25 REPS	3 SETS - 15 REPS
4 WAY NECK MACHINE	**CRUNCHES**-2 SETS-20 REPS			
1 SET - 10 REPS	**REVERSE CRUNCHES**			**ABS CRUNCHES** 2 X 25
	2 SETS-20 REPS			**REVERSE CRUNCHES**
ABS - TWISTING SIT-UPS	STRETCH		STRETCH	2 X 20
2 SETS - 25 REPS				
	*SPEED WORK-OUT			
	(BEFORE WEIGHTS)			
STRETCH	STARTS-4 - 10 YDS			
	BACKWARD HIGH KNEES			STRETCH
CONDITIONING(AFTER WTS.)	2-10 YDS		CONDITIONING(AFTER WTS.)	*SPEED WORK-OUT
10-110'S	HIGH KNEE CROSSOVERS			(BEFORE WEIGHTS)
17 SEC SKILL POS.	2 X 10 YDS		SAME AS MONDAY	SAME AS TUE'S WORK-OUT
19 SEC LINEMEN	POWER SKIPS 4 X 30 YDS			
45 SEC REST BETWEEN 110'S	FORM RUNNING 4 X 30 YDS			

WEEK # 8 DATE July 24-28 SIGNEE'S SUMMER WORK-OUT

"THE SECRET TO HAPPINESS IS NOT IN DOING WHAT ONE LIKES, BUT IN LIKING WHAT ONE DOES."
J. BARRIE

MON	TUE	WED.	THURS.	FRI.
JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN	ACTIVE REST	JUMP ROPE 2-3 MIN	JUMP ROPE 2-3 MIN
BENCH PRESS	**BACK SQUAT**		**INCLINE BENCH PRESS**	**HANG CLEAN**
WARM-UP 10 REPS	WARM-UP - 10		4 SETS - 6 REPS	WARM-UP - 5 REPS
61% - 5 REPS	61% - 5 REPS	PLAY BASKETBALL,		64% - 3 REPS
67% - 5 REPS	67% - 5 REPS	RACQUETBALL,	**D'BELL BENCH PRESS**	70% - 3 REPS
76% - 3 REPS	76% - 3 REPS	DO MARTIAL ARTS ETC.	(STOP AND STAB)	76% - 3 REPS
85% - 3 REPS	85% - 3 REPS		3 SETS - 6 REPS	82% - 3 REPS
91% - 3 REPS	91% - 3 REPS	OR		88% - 2 REPS
CLOSE GRIP BENCH PRESS	**STRAIGHT LEG DEADLIFTS**		**WEIGHTED DIPS**	
2 SETS - 6 REPS	2 SETS - 8 REPS	RUN 1 - 2 MILES	3 SETS - 8 REPS	**BOX STEP UPS**
		EASY PACE		2 SETS - 5 REPS
	SEATED CABLE ROWS		**BARBELL CURLS**	
SEATED D'BELL	3 SETS - 8 REPS		4 SETS 8 REPS	
OVERHEAD PRESS	OR			**LUNGES** 2 SETS-5 REPS
3 SETS - 6 REPS	**D'BELL ROWS**			
	3 SETS - 8 REPS			
ALTERNATE D'BELL CURLS				
3 SETS - 10 REPS	**LAT. MACHINE PULLDOWNS**			
	3 SETS - 10 REPS		**4-WAY NECK MACHINE**	**SHRUGS**
			1 SET - 10 REPS	3 SETS - 6 REPS
	CALF RAISES		**ABS-TWISTING SIT-UPS**	**CALF RAISES**
	3 SETS - 15 REPS		2 SETS - 25 REPS	3 SETS - 15 REPS
	ABS			
4 WAY NECK MACHINE	**CRUNCHES**-2 SETS-20 REPS			
1 SET - 10 REPS	**REVERSE CRUNCHES**			**ABS CRUNCHES** 2 X 25
	2 SETS-20 REPS			**REVERSE CRUNCHES**
ABS - TWISTING SIT-UPS	STRETCH		STRETCH	2 X 20
2 SETS - 25 REPS				
	*SPEED WORK-OUT			
	(BEFORE WEIGHTS)			
STRETCH	STARTS-4 - 10 YDS			
	BACKWARD HIGH KNEES			STRETCH
CONDITIONING(AFTER WTS.)	2-10 YDS		CONDITIONING(AFTER WTS.)	*SPEED WORK-OUT
11-110'S	HIGH KNEE CROSSOVERS			(BEFORE WEIGHTS)
17 SEC SKILL POS.	2 X 10 YDS		SAME AS MONDAY	SAME AS TUE'S WORK-OUT
19 SEC LINEMEN	POWER SKIPS 4 X 30 YDS			
45 SEC REST BETWEEN	FORM RUNNING 4 X 30 YDS			
110'S				

PREDICTED MAXIMUM

# Repetitions	%
1	1.000
2	.955
3	.917
4	.885
5	.857
6	.832
7	.809
8	.788
9	.769
10	.752
11	.736
12	.721

Sample: Maximum of 5 Reps with 280 Pounds

280 ÷ .857 = 325 Predicted Max.

FORM RUNNING
The Do's and Don'ts of Running

Do's	Don'ts
1. High knee action to lengthen stride.	1. No high knee action.
2. High on toes for spring.	2. Run flat-footed.
3. Good forward lean, looking straight ahead.	3. Backward lean with the head high.
4. Keep arms bent at 90 degrees and swing forward from shoulders.	4. Arms come unbent, and hands cross back and forth across chest.
5. Keep jaw and hands loose.	5. Set jaw and clench fists.
6. Reach out with foreleg to increase stride.	6. Put leg down without foreleg reach.
7. Have little rear kickup-bound forward off toes.	7. Have high rear kick due to high bounding action.
8. Run with feet in straight line.	8. Run with feet crossing over.
	9. Run with shoulders hunched.
	10. Extend head forward.
	11. Grit teeth.
	12. Swing head.
RELAXATION!	13. Run with head down.
	14. Look back.

The way to more efficient running and sprinting is to practice the components of good running technique.

Like any other phase of a well-developed training program, it can help to make you a better player only if you let it. That means effort on your part. To become a better player by improving in all areas of a training regimen requires a great deal of self-motivation.

IMPROVING STRIDE LENGTH TO IMPROVE RUNNING SPEED

by Dean Brittenham - Former CU Track Coach -
Lyons, Colorado

Sprinting consists of three basic components:

A. **Rhythm or Cadence**

1. We know that training has little or no effect on rate of striding. The speed of muscular contraction being a natural quality gives a basis of truth to the saying that "a sprinter is born and not made". Research indicates that muscle fiber speed cannot be changed.

2. The ability to coordinate the power (strength and speed) of one related muscle group is ACQUIRED.

3. It is acquired through intelligent training in proper form, relaxation, strength, endurance and flexibility.

B. **Relaxation**

1. The fast individuals make running look easy and effortless because they are explosive, efficient and they have a long relatively slow stride. Great Coordination.

C. **Stride Length**

1. Stride Length is the easiest way to improve on individual's speed.

   a. Every fast person has had a long stride. Regardless of height, it is possible to have a long stride.

   b. Cliff Branch and Houston McTeer both relatively short individuals who ran with over an eight-foot stride.

   c. It is difficult to run fast with a stride of less that 7'6". Tony Dorsett and Chuck Muncie, great backs, run with tremendously long strides.

2. How do we increase stride length?

   1. Increase athlete's strength.

      1. The sprinter with a long stride is tremendously strong in proportion to his body weight.

      2. The stronger the athlete, the more explosively he runs and the more explosive the arms and legs, the longer the stride.

3. Increase joint mobility (hip, knee, ankle, shoulder, elbow and wrist).
    a. The greater the flexibility, the greater the range of motion over which the athlete can exert force.

4. Develop greater **coordination** of the athlete.
    a. A more efficient runner will channel his strength and explosions into better and more coordinated running form.

D. What does good or **fast running** form look like?

1. The athlete runs tall.
    a. Straight line of drive. No bends in body, body leverage aligned to transfer power.

2. High kick of recovery leg.
    a. Short lever is a faster recovery.

3. High knee action result of a great explosion of the foot and ankle.
    a. The greater the force the knee is driven upward and forward, the greater the force exerted in the opposite direction of the driving leg, foot and ankle. (Newton's 3rd Law).

4. Arm Action - vigorous elbow drive - especially behind the body.
    a. Relaxed wrist and hands (palms down).
    b. Hands stay low below the shoulders.
    c. Arm action forward and backwards, not across body.

5. Blocking - increase impulse.

E. Sprint Start (stance)

1. Stay low.

2. **Long first** step - high knees.

3. Vigorous elbow drive.

Sprinting and Speed Improvement Drills - Why Do the Drills:
Concentration, Emphasis, Specific Drill on Activity.

A. The following drills, exercises and activities constitute a program designed to improve running speed through stride length, leg cadence, increased muscular strength and body flexibility.

1. **Ankle Flips** - 4-8 times 30 yards. The athlete moves forward slowly, alternately exploding off the foot and toes. The knees are kept stiff during this exercise. The athlete lands high on his toes and settles to his heel, then vigorously extends his foot and ankle projecting him a foot or two in the air. He then lands on the toe of the other foot, settles down to the heel and again vigorously extends the foot and ankle. This builds strength in the foot and ankle. The object is to see how high the athlete can get on each explosion to the foot and ankle.

2. **Bounding** - 4-8 times 40 yards. This is movement forward at what could be about one fourth running speed. This action is a deliberately exaggerated, explosive type of running. The knees are lifted high on each stride. The knee should come up parallel to the ground and the arms are used very vigorously. The object is to bound forward for distance as vigorously as possible.

3. **High Knees** - 4-8 times 20 yards. This is very similar to running in place, bringing the knees up high and driving the elbows vigorously. The difference between this and running in place is that the athlete moves forward very slowly, but with very fast action and rhythm. Each step forward is very fast and short, about one foot. So the athlete would take around sixty fast steps in the 20 yards.

4. **Line Running** - 4-6 times 40 yards. The purpose of this drill is to encourage the athlete to lengthen his stride. The athlete runs ten yards and hits a yard marker with either foot. He then steps in-between markers and the next step is on the next yard marker. This would mean the athlete is running with a 7 1/2 footstride. A 7 1/2 foot stride is good if the athlete can do this at a good, fast rhythm. As the athletes can run at top speed with a 7 1/2 foot stride, pieces of tape are placed at 8 foot intervals. Then as the athlete can hit these marks, they are moved to an 8 1/2 foot distance. To hit this long of a stride, the athlete has to drive his elbows back vigorously and lift the knees up vigorously.

5. **Form Sprints** - 4-8 times 40 yards. In this activity we are applying the individual things that we have been working. The ideal form will be: Body tall and erect and in straight alignment, knees lifted to parallel with the ground, feet pointed straight ahead, arm action more behind torso than in front - elbows drive back vigorously on each stride and the elbows stay at 90 to 130 degrees at all times, the hands are palm down and completely relaxed at all times, arm action is straight ahead and not across the body. If there is a body lean, it is natural, a result of drive from the foot and ankle explosion. Do not teach an athlete to lean - it will occur if the athlete has efficient, powerful running form. The kick up of the push-off foot and leg will be high and natural up behind the athlete. Complete relaxation coordinated with powerful, explosive arm and leg action is the key to fast sprinting.

Fast sprinting is characterized by long, low, powerful strides. Action is forward and not up. Great sprinters make sprinting look effortless because of the perfectly coordinated with powerful, explosive arm and leg action is the key to fast sprinting.

6. **Starts** - 6-8 times. Encourage the athlete to take a three-point stance. He will place his strongest foot forward about 6-8 inches from the line and the opposite hand just behind the line. His opposite hand should be placed on the hip of the forward leg. Most of his weight will be on the forward leg and down hand. The hips should be at a medium height. As you observe from the side, his hips should stay the same level as he takes his first steps. They should not raise up or drop down as he starts and runs.

7. **Heel Kick-Ups** - 4-6 x's 10 yards. Move forward slowly, popping the heels up against the back of the thigh on each step.

8. **High Knees with a Heel Kick-Up** - Combine heel kick-ups with the high knees. Start doing high knees first.

9. **High Knees with a Fore-Leg Reach** - Do a high knee, skip with foot on the ground and extend the fore leg out parallel to the ground and then repeat with the other leg.

10. **Belts** - 4-6 time 30 yards. These are canvas belts 4-6 inches wide and two feet long. On each end of the belt there is attached a one-inch web belt that is 8 to 10 feet long. The belt is placed around the middle of the exercising athlete and the web belts are held by the athlete's partner. The exercising athlete runs with good running form as the other athlete holds back on the ends of the web cords. This is a great conditioner and it also is fantastic for teaching proper, efficient, powerful running form. The athlete can move forward only at about half speed because of the resistance given by the other athlete. The athletes change place at the end of each 30-yard run.

11 **Hopping** - 10 yards right leg; 10 yards left leg.

12. **Sprinting** - Concentration on a wider range of movement of arms.

13. **Reach Exercise** - Practice exaggerating reach of foreleg as you go down the field on the grass.

DESCRIPTION OF EXERCISES

ch Press - Use a shoulder width grip. Lie down on a flat bench. Lower the weight wly until the bar touches the middle of the chest and drive the bar upward towards the k. Keep feet flat on the floor and buttocks on the bench at all times. Always use a spotter. his exercise primarily works the chest, shoulders and triceps.

Incline Bench Press - Use a 45° incline bench and a shoulder-width grip. Bring the bar down until it touches the upper chest near the neck and drive it back toward the rack. Stay in control of the weight at all times. Always keep the back flat against the bench and the buttocks on the bench throughout the lift. Use a spotter. This exercise primarily works the upper chest, shoulders and triceps.

Close Grip Bench - Use the same technique as the regular bench press except move the grip in to approximately 12"-14" apart. Use a spotter. This exercise primarily works the triceps, chest and shoulders.

Hang Clean - This exercise is a variation of the power clean. It incorporates the best part of the movement and is much easier to teach. Take the weight off of blocks about 2-1/2 feet tall or pick it up off the floor. Stand erect, then bend the knees and let the bar dip about 5" with the shoulders over the bar. At this position jump and shrug the shoulders hard. Keep the weight close to the body during the ascent of the bar and the elbows over the wrist during the pull. Rack the weight on the shoulders, then repeat the movement. Feet should be shoulder width apart. Hand spacing should be directly outside the thighs. This is a quick explosive ovement. This exercise primarily works the hips, legs, and upper back.

Shrugs - This movement is the same as the hang clean except you stop the movement after the powerful shoulder shrug. Do not pull the weight all the way up or rack it on the shoulders. Keep the arms straight. Still an explosive movement. Use a lot of weight in the exercise. This exercise works the upper back, hips and legs.

Power Pulls or High Pulls - These are a variation of a hang clean. The bar is taken off the blocks just as in the hang clean. All of the fundamentals are the same as the power clean except the bar is not racked on the shoulders. The finish position should be with bar at chest level and the elbow over the wrist. Do no perform an upright row, this is an explosive movement. The exercise works the hips, legs and back., It is a good lead up to the hang clean and a good way to vary the intensity of cleans in a cycle. We use straps on this lift.

Push Press - Do this exercise standing, take the weight out of racks. The bar is racked on the shoulders as in the completion of a hang clean. Rock up on the toes to get your momentum started, then squat 4" to 5" and quickly drive the legs up and throw the weight overhead. The bar should lock-out directly over the lifters head or slightly behind. Bend your knees when you lock out the weight, then stand up. This is a jerk not a military press. The concept is of throwing and catching the weight not of guessing it. Be explosive, use the gs. Use spotters on both sides to help lower the weight. This exercise works the hips, legs, shoulders and triceps.

Back Squats - This is the foundation of our strength program. Rest the bar on the ba right below the trapezious, keep the back arched and the weight over the hips at all time The feet should be slightly wider that shoulder width with the toes slightly pointed out. Go down slowly until the bottom of the thigh is parallel to the floor. Drive up quickly. Do not bounce at the bottom of the lift. This exercise works the hips, legs and lower back. Use a spotter on both sides.

Front Squats - The technique is the same as the back squat except the weight is racked on the shoulders in front of the body. Keep the elbows up and let the bar rest on the deltoids, do not try to "hold" the weight with the hands and arms. Use two spotters. This exercise works the legs, hips and lower back.

Speed Back Squats - We do speed squats using an olympic style squat (the bar rests high on the traps and feet are closer together). The object is to see how many reps the athlete can do in a specified time limit, usually 10-15 seconds. However, the descent phase of the lift is controlled and the ascent is done as rapidly as possible. The weight used should be approximately 75% of the best set of 5 reps in the regular back squat. This exercise should help develop explosive power and carry over well to the vertical jump and the field. The exercise works the hips, legs and lower back.

Nautilus Leg Extension - Place feet behind roller pads with knees snug against seat and head and shoulders against seat back. Straighten both legs slowly and pause at full extension. Lower the legs slowly until you feel the weights touch. This exercise works the frontal thigh and especially around the knee.

Nautilus Leg Curls - Lie face down on the machine, place feet under the roller pads and place knees slightly off the edge of the bench. Grasp the handles and flex the knees until the pads almost touch the buttocks. Pause at the point of maximum contraction. Lower the weight slowly until you feel the weights touch. Keep the toes pointed towards the knees throughout the movement (Dorsal flexed). This exercise works the hamstrings and is very important in the prevention of hamstring pulls.

Weighted Dips - We use a dip belt and handle as much weight as possible with good form. The athlete gets into position on the dip rack by stepping off a chair. He then flexes the elbows and slowly lowers himself into a position of the chest being approximately parallel to the dip rack and extends the arm to raise himself up. This is a great assistance exercise for the bench press. The exercise works the chest, triceps, and deltoids.

Lying Tricep Extensions - This exercise is done lying on a flat bench and using a curl bar. Taking a close grip on the curl bar, slowly lower the weight to the forehand and extend the arms straight up using as little excess movement as possible. Try to keep the elbows in and the bar directly above the head at all times. This movement is a great assistance exercise for the bench press. It primarily works the tricep muscle.

ch Pulls - This lift follows the same fundamentals as the hang clean with two exceptions. hand placement, unlike the hang clean, should be wide so that the hand is covering the on the bar. The bar is not racked on this lift but is at a finish position with the bar at st level with elbows up. This lift, an explosive movement working the hips, legs, and back, a good lead up to the hang clean.

yperextensions - This exercise is performed on the hyperextension bench. The athlete hould be in a face down position with the thighs on the pads. The hands are placed across the hest or behind the head. Bend the torso forward until the body is at 90 , then raise up so that the body is parallel or slightly above. Do this exercise under control. Hyperextensions strengthen the lower back muscles.

Bent-Over Rows - Use approximately the same grip width as the bench press. Bend over so that the back is parallel to the floor and the knees are slightly bent. Pull the bar to the abdomen, then lower to arm's length. Straps should be used and parallel posture maintained. This movement strengthens the back muscles.

Curls - Standing upright, take a shoulder width grip using an Olympic bar. Feet should be shoulder width also. With as little body swing as possible, flex the arms at the elbow and raise the bar to the chin. Slowly lower the bar back to the starting position. Make sure the elbows e fully extended at the starting position. This exercise works the biceps and forearms.

ullups - Take an overhand grip on the pullup bar with the hands approximately shoulder width apart. Flex the elbows and pull until the chin is over the bar and slowly lower the body back to the starting position. Make sure to get a good stretch at the starting position of the lift. This exercise is great for adding width to the back and also stretches the lower back.

Nautilus Four Way Neck Machine - Do one set of ten repetitions, facing in all four directions. Go slowly and pause at the point of maximum contraction. Adjust the seat so that the nose is directly in the middle of the two face pads to start the exercise. You can also do isometric exercises with partners or neck bridges in the absence of a neck machine.

Situps - Abdominal training should not be overlooked. Not only will the athlete have stronger abs, but lower back problems may be avoided due to regular abdominal training. Do bent knee situps on the floor and do not hook the feet under anything or hold the feet. The feet should be flat on the floor and close to the body. Keep the hands and arms in front of the body with the hands on the shoulders and the arms tucked into the sides. Go all the way up and lower the body until the lower back touches and repeat. 2 - 3 sets of 25 reps should be enough.

VIRGINIA TECH JUMP ROPE ROUTINE

Intervals

	Length (seconds)	Rest Time (seconds)
Both feet	30	15
Right foot	15	0
Left foot	15	15
Alternate foot	30	15
Shuffle	30	15
Twice on right, Twice on left	30	15
Double-over with rope	20	15
As many jumps as you can get	30	15

As you get in better shape, decrease the rest intervals to 10 seconds. Make your feet do what you mind tells them to!

DESCRIPTION OF PLYOMETRIC EXERCISES

Standing Tuck Jumps - This is a lead-up plyometric exercise. From a standing position, rive the legs up from the ground, springing equally from both feet. Lift the knees in a tuck position until they touch the chest, then release from the tuck position and land on both feet. It is important that the athlete spend as little time on the ground as possible.

2. Straddle Jumps - Stand on two feet, drive straight up and jump as high as possible. After jumping, bring your legs up and out to the side and touch your toes at the peak of the jump. Quickly bring your legs down to prepare for the next jump.

3. Scissor Kick Jumps - Athlete is standing on both feet. Take a step forward with the left leg and then kick the right leg up as high as possible. At the height of the kick, just before the left foot leaves the ground, touch your right foot with your right hand. Then, bring your left leg up as high as possible as the right leg drops down. Touch the left foot with the left hand before the right foot hits the floor. This is a tough skill to master.

4. Bench or Bag Jumps - Athlete stands next to a back or football dummy 12" - 18" high. On ommand the athlete jumps with both feet from side to side over the bench or bag keeping the feet together. The athlete should try to avoid resetting the feet upon landing, hit and go, hit and go. Can be done for number of reps or as many as possible in a time limit.

5. Double Leg Hops - The athlete starts and lands on both feet. Try to jump as high and far as possible. A good knee bend, yet not more that 90°, is important. Try not to reset and get full extension of the legs. 1 - 3 sets or 20 - 30 yards.

6. Single Leg Hops - Principles are the same as in double leg hops except the athlete is jumping off one leg. Try to cover as much distance as possible with each jump at moderate speed. You can alternate L-L-R-R or L-R-L-R.

7. Power Skips - The emphasis on power skipping is height. Take a short skip step with the right foot, then reach forward with the left foot and drive up as high as possible, then repeat with the left foot. Really just exaggerated skipping. Work up to 3 - 4 sets of 50 -100 yards.

8. Box Jump - There are many variations of box jumps. The first drill we will use will be done with 18" boxes. The athlete will merely jump off both feet and try to land softly on top of the box, he will then step down off the box and repeat 10 times. We will also do this drill holding dumbbells in front of the body to increase the difficulty. Do not let the athletes swing the dumbbells for momentum.

9. Standing Long Jumps - This is a lead up plyometric drill. The athlete starts with both on the ground and leaps out, emphasizing distance, not height, use a double arm thrust at tak off to increase distance. Try to keep the knee tucked during the jump, arms over the head Allow adequate recovery between jumps, at least 30 seconds.

10. Standing Triple Jump - This exercise develops both horizontal and vertical jumpin ability, leg strength, balance, and coordination. Stand on both feet, jump forward, landin first on the right foot, then directly on the left foot, then on both feet. Emphasize distance not height.

11. Single Leg Bounds - This drill is performed with a running start in which the athlete shortens the radius of movement of the leg by tucking the heel against the buttocks and rapidly moves the thigh forward. The lower leg then extends and reaches for landing on the same leg.

12. Alternate Leg Bounds - Using basically the same reaching and pulling activity done during single leg bound except the athlete lands with opposite foot each jump.

13. Hurdle Hops - Using 5 hurdles or sticks placed 18" - 24" high, one yard apart, the athlete jumps from a standing position on both feet over each hurdle and back up as quickly as possible over the next. A variation to this drill is side hurdle hops, using the same equipment the athlete is sideways to the hurdle and jumps through the hurdles with both feet.

14. High Knee Drill - Two coaches stand to the side and slightly in front of a line of football players. The coaches hold a rope that is stretched directly in front of the athletes at waist level. The athletes run in place and make their knees touch the rope. Make sure you have good arm action and forward body lean by the athletes. Slowly walk forward, drop the rope after 10 - 15 yards and the athletes sprint forward.

15. Depth Jumps - Again there are many variations of this drill. We will use 18" boxes from which the athlete will jump down from the box to the floor and immediately rebound up vertically as high as possible, again as little contact time with the floor as possible. Start with 1 set of 10 - 15 once a week and gradually increase to twice a week.

16. Depth Jump with Two or More Boxes - Set up 2 or more boxes 18" high about 6" - 8" apart. Start with both feet, jump from box one to the ground then up to box two then to the ground until you have jumped on all three boxes.

17. Box Endurance Jumps - Athlete stands beside (sideways) to an 18" box, on command he jumps up on the box and down to the ground on the other side and back up on the box as quickly as possible and continues the drill for 90 seconds. A good conditioning test.

18. Four-Line Hop Drill - Draw a 5" or 6" square on a flat surface. Stand on line A facing away from the square. Hop to line B, then to line C, then to line D, and back to line A. Do several sets of 30 seconds with at least 30 seconds rest between sets. A tough drill!!